-6-

<u>REMARKS</u>

The Examiner has rejected Claims 1-6, 11, and 16-26 under 35 U.S.C. 112, first paragraph, as based on a disclosure that is not enabling. The Examiner alleges that the process of "improving speech recognition" is not enabled by the disclosure.

Specifically, the Examiner argues that the claimed "improving a speech recognition process wherein a human is capable of utilizing the information and the transcriptions to improve a speech recognition process" is not enabled, in that the specification does not recite as to how it is improved.

Applicant respectfully disagrees with this assertion. Specifically, the speech recognition process is improved by tuning in the context of the remaining claim elements namely, by:

"maintaining a database of utterances;

<u>collecting information associated with the utterances in the database utilizing a speech recognition process;</u>

<u>transmitting the utterances in the database to at least one user interface utilizing a network;</u>

<u>receiving **transcriptions** of the utterances in the database **from the at least one user interface utilizing the network;**</u>

wherein <u>a human is capable of utilizing the **information** and **the transcriptions**</u> to improve a speech recognition application" (emphasis added).

The Examiner concludes by asserting that 'the claimed invention lacks enablement, and only recites a wished-for result of automatic "tuning."' First, applicant does not *claim* <u>automatic</u> tuning, and thus need not enable such concept (i.e. applicant need only enable the claimed invention, etc.).

-7-

Instead, applicant claims improving a speech recognition application by collecting information associated with utterances in a database utilizing a speech recognition process, and then transmitting the utterances in the database to at least one user interface utilizing a network, so that transcriptions of the utterances in the database may be received from the at least one user interface utilizing the network. To this end, a human is capable of utilizing the information and the transcriptions for improving speech recognition by tuning in the specific context claimed. Only applicant teaches and claims the improving (i.e. tuning, etc.) speech recognition using the acts specifically called out by the claims.

In past correspondence, the Examiner has alleged that the "tuning" taught in applicant's originally filed application is not enabled. Applicant respectfully disagrees. The general concept of "tuning," absent the accompanying features claimed therewith in the present application, was well known at the time the present invention was made. Note, for example, the following excerpts from various U.S. Patents with priority dates prior to applicant's priority date. Emphasis has been added.

> US6,208,964 -A more specific object of the invention is to provide a method and apparatus that utilize a signal representative of audio information produced when uttering a certain word that is input to a speech recognition system along with the vocabulary item selected by the speech recognition system as being a match to the uttered word, <u>in order to fine tune the transcription for the certain word that is stored in the dictionary of the speech recognition system.</u>

> US5,893,059 - Recognition and training of the speech recognition system of the present invention is driven by a set of configurable parameters or weights that can be modified according to the needs of an application, and/or to address site-specific or customer-specific issues including speech recognition model generation and scoring issues as discussed above. Parameters that are used to modify the grammar and the Viterbi search include externally input grammar, word spotting an scoring probabilities to be attached to the speaker-dependent garbage models, the application-specific garbage models, and the word-spotting garbage models. Additional parameters may be used to control pruning beam width, etc. Parameters that are used to control post-processing, e.g., recognition score threshold used for rejection, various training score thresholds for testing the similarity to existing names, and the consistency of training utterances, duration limits for very short or long utterances, and parameters for testing Viterbi alignment may also be adjusted

-8-

and used to control or modify, e.g., <u>fine tune</u>, the speech recognition process in accordance with the present invention.

US5,819,220 - Interpreting the language model weights as "boosting" values enables the formulation of utterance specific triggering effects in dialogues so as to improve speech recognition accuracy. In addition, <u>an adaptive algorithm for tuning these word dependent language model weights is given in "Word Set Probability Boosting for Improved Spontaneous Dialogue Recognition", Ramesh R. Sarukkai and Dana H. Ballard, published as a Technical Report at University of Rochester entitled "Word Set Probability Boosting Using Utterance and Dialog Triggers for Improved Spontaneous Dialogue Recognition: The AB/TAB Algorithms", Ramesh R. Sarukkai and Dana H. Ballard, URCSTR 601, Dept. of Computer Science, Univ.of Rochester, December 1995 and to appear in IEEE Transactions on Speech and Audio Processing.</u>

US5,991,719 - This embodiment makes it possible to perform the process of adding to or changing the semantic number-registered word list and thus to <u>tune up the processes by the semantic recognition system.</u>

Thus, tuning, in general, was well known at the time of the invention; however, improving (i.e. tuning, etc.) a speech recognition application in the context of the following claim limitations, was <u>not</u>:

"maintaining a database of utterances;

<u>collecting</u> **information** <u>associated with the utterances in the database utilizing a speech recognition process;</u>

<u>transmitting the utterances in the database to at least one user interface utilizing a network;</u>

<u>receiving</u> **transcriptions of the utterances in the database from the at least one user interface utilizing the network;**

wherein <u>a human is capable of utilizing the</u> **information** <u>and the</u> **transcriptions** to improve a speech recognition application" (emphasis added)

Thus, the presently claimed invention is clearly enabled in that applicant claims the foregoing unique way of improving (i.e. tuning, etc.) a speech recognition application. This is accomplished by collecting information (e.g. see contents of Claim 16, for example, etc.) associated with utterances in a database utilizing a speech recognition process. The utterances in the database are then sent to at least one user

-9-

interface utilizing a network, so that transcriptions of the utterances may be received from the at least one user interface utilizing the network. To this end, a human is armed with both the collected information and the transcriptions, in the manner claimed, so that such human is capable of utilizing the information and transcriptions for improving speech recognition by tuning, in the specific context claimed. Only applicant teaches and claims the improving (i.e. tuning, etc.) of speech recognition using the acts specifically called out by the claims.

The Examiner continues by arguing that Claims 1-6,11, and 16-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically, the Examiner argues that the "improving" or "tuning" process terminology is not art standard for the speech recognition art and thus is vague and indefinite. Applicant respectfully disagrees with this assertion, in view of the excerpts above evidencing, in fact, that the "improving" or "tuning" process terminology is indeed standard in the art for the speech recognition art and thus is not vague and/or indefinite.

The Examiner concludes with the question: what is the "improving" that is being claimed?" In response, applicant reiterates that such improving, for example, may include the disclosed tuning that is specifically carried out by implementing each of the operations that are claimed.
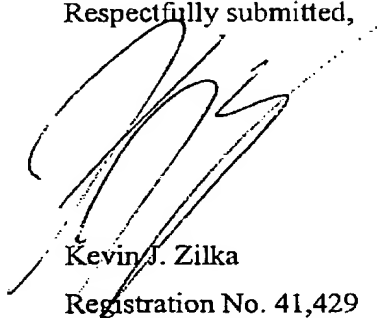
Reconsideration and a notice of allowance, or a specific prior art showing of each of the claim elements, in combination with the remaining claim elements, is respectfully requested.

In the event a telephone conversation would expedite the prosecution of this application, the Examiner may reach the undersigned at (408) 505-5100. The

-10-

Commissioner is authorized to charge any additional fees or credit any overpayment to
Deposit Account No. 50-1351 (Order No. BVOCP001).

Respectfully submitted,

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